Contents

Locality weighted distribution

2 minute read ✔ page test

Follow this guide to configure the distribution of traffic across localities.

Before proceeding, be sure to complete the steps under before you begin.

In this task, you will use the `Sleep` pod in `region1 zone1` as the source of requests to the `HelloWorld` service. You will configure Istio with the following distribution across

localities:

Region	Zone	% of traffic
`region1`	`zone1`	70
`region1`	`zone2`	20
`region2`	`zone3`	0
`region3`	`zone4`	10

Configure Weighted Distribution

Apply a `DestinationRule` that configures the following:

- Outlier detection for the `HelloWorld` service. This is required in order for distribution to function properly. In particular, it configures the sidecar proxies to know when endpoints for a service are unhealthy.
- Weighted Distribution for the `HelloWorld` service as described in the table above.

```
$ kubectl --context="${CTX_PRIMARY}" apply -n sampl
e -f - <<EOF
apiVersion: networking.istio.io/v1beta1
kind: DestinationRule
metadata:
  name: helloworld
spec:
  host: helloworld.sample.svc.cluster.local
  trafficPolicy:
    loadBalancer:
      localityLbSetting:
        enabled: true
        distribute:
        - from: region1/zone1/*
          to:
            "region1/zone1/*": 70
            "region1/zone2/*": 20
            "region3/zone4/*": 10
    outlierDetection:
      consecutive5xxErrors: 100
      interval: 1s
      baseEjectionTime: 1m
EOF
```

Verify the distribution

Call the `HelloWorld` service from the `Sleep` pod:

```
$ kubectl exec --context="${CTX_R1_Z1}" -n sample -c sleep \
  "$(kubectl get pod --context="${CTX_R1_Z1}" -n sample -l \
  app=sleep -o jsonpath='{.items[0].metadata.name}')" \
  -- curl -sSL helloworld.sample:5000/hello
```

Repeat this a number of times and verify that the number of replies for each pod match the expected percentage in the table at the top of this guide.

Congratulations! You successfully configured locality distribution!

Next steps

Cleanup resources and files from this task.